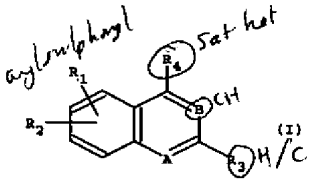
96-094177/10 B02 (B05) CHUS 94.06.21
CHUGAI PHARM CO LTD *JP 08003144-A
94.06.21 94JP-173067 *(96.01.09)* C07D 239/72, C07C 43/235, 43/257, 49/84, 205/06, 211/57, 211/58, 211/59, C07D 403/04, 401/04, C07C 211/60, 255/49, 317/16, 317/26, 317/44, C07D 215/50 // A61K 31/47, 31/505

Novel quinazoline and quinoline derivs. - are potassium channel openers with vasodilatory activity

C96-030111

Quinazoline and quinoline derivs. of formula (I) and their salts are new.



B(6-D2, 6-D6, 14-F2D) .3

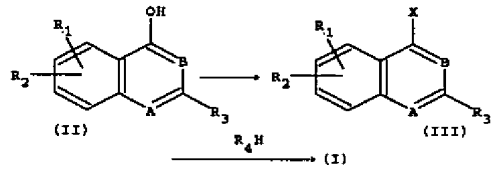
A, B = N or CH;
R_1, R_2 = H, lower alkyl, lower haloalkyl, lower alkoxy, lower haloalkoxy, halogen, cyano, nitro, lower alkylsulphonyl, lower haloalkylsulphonyl, arylsulphonyl, acyl, carboxyl, ester or amide;
R_3 = H, opt. substd. lower alkyl, or opt. substd. aryl;
R_4 = opt. satd. heterocyclic gp., carboamide, carbothioamide, cyanamide, opt. substd. amino, lower alkoxy, cycloalkyloxy, aryloxy or heteroalkyloxy.

ADVANTAGE

(I) have high vasodilatory activity as potassium channel openers.

JP 08003144-A+

PREPARATION



X = halogen.

EXAMPLE

Na hydride (33 mg), 4-chloro-2-ethyl-6-nitroquinazoline (170 mg) and DMF (3 ml) were added to 2-hydoxypyridine (82 mg) and DMF (3 ml). The mixt. was stirred at room temp. for 14.5 hrs. Water was added and the mixt. extracted with ethyl acetate.

Work-up including silica gel chromatography gave 40 mg 2-ethyl-4-(1,2-dihydro-2-oxopyridyl)-6- nitroquinazoline, m.p. 221-223°C. (LD)

(13pp097DwgNo.0/0)

JP 08003144-A